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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/638,192	08/15/2000	Ivan A. Cowie	28549-165559	1610

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EXAMINER

MUNOZ, GUILLERMO

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 10/27/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/638,192	Applicant(s) COWIE ET AL.	
	Examiner Guillermo Munoz	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 17-19, 21-24, 26-44 and 46-49 is/are rejected.
- 7) ☒ Claim(s) 12-16, 20, 25, 37-41, 45, and 50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Drawings

The drawings filed on August 15, 2000 are acceptable subject to correction of the informalities indicated on the attached "Notice of Draftsperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: The numbering of specification pages is not sequential. It is suggested the specification pages be renumbered sequentially.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6-10, 17-19, 22-24, 26-28, 31-35, 42-44, and 47-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Rybicki et al. (US 6,212,230 B1).

Regarding claims 1 and 26, Rybicki et al. disclose a Pulse Position Modulation Method and Apparatus which teaches all the claimed subject matter, note figures 1, 2, and 4, col. 5, line

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20 to col. 6, line 60, and col. 7, line 24 to col. 8, line 3. Rybicki et al. teach a code generator which can have at least two code element values, as illustrated in figure 4. Further, Rybicki et al. teach associating an amplitude pulse characteristic with the generated code, note column 6, lines 13-35.

Regarding claims 2 and 27, Rybicki et al. further teach the claimed subject matter "non-temporal...pulse width characteristic" in Col. 14, lines 16-25.

Regarding claims 3 and 28, see claim 2 above.

Regarding claims 6 and 31, Rybicki et al. further teach the claimed subject matter "code element...pulse characteristic" in figure 4.

Regarding claims 7 and 32, see claim 6 above.

Regarding claims 8 and 33, Rybicki et al. further teach the claimed subject matter "code element...comprises an integer" in figure 4.

Regarding claims 9, 10, 34 and 35, Rybicki et al. further teach the claimed subject matter "code element values indicate...range of non-temporal pulse characteristic values" in figures 4, 13 and 26.

Regarding claims 17-19 and 42-44, Rybicki et al. further teaches the value of pulse characteristic is specified within a value component, note figure 4.

Regarding claims 22 and 47, Rybicki et al. further teaches the claimed subject matter in Col. 1, lines 21-39.

Regarding claims 23 and 48, Rybicki et al. teach the claimed subject matter "code element...pulse characteristic values" in table listed in columns 8-12.

Regarding claims 24 and 49, Rybicki et al. further teach the claimed subject matter "each code element value...pulse characteristic values" in Col. 7, lines 30-46 or Col.24, lines 43-56.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 11, 21, 29, 30, 36, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rybicki et al. (US 6,212,230 B1) in view of McCorkle et al (US 2003/0053555 A1).

Regarding claims 4 and 29, Rybicki et al. disclose all the subject matter claimed, note claim 1 above, except their code generator does not contain polarity characteristics.

McCorkle et al. teach the use of inverted or non-inverted copies of coded data for the purpose of communicating information in a pulse position modulation system (page 1, paragraph 0010).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rybicki et al.'s impulse communication system with McCorkle et al.'s teaching of using inverted or non-inverted copies of coded information, since McCorkle et al. suggest on page 3, paragraph 0047 that the result of this modulation would help to generate larger collections of codes.

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Regarding claims 5 and 30, McCorkle et al. further teach the claimed subject matter in page 6, paragraph 0107.

Regarding claims 11 and 36, McCorkle et al. further teach the claimed subject matter in page 4, paragraph 0071.

Regarding claims 21 and 46, see claim 4.

Claim Objections

Claims 12-16, 20, 25, 37-41, 45, and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 703-305-4224. The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Guillermo Munoz

GM
October 20, 2003

[Signature]
STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600